

Volume 10, Number 1

January 1997

JTSTEB 10(1) 1-162 (1997)

ISSN 0894-9867

Journal of Traumatic Stress

PLENUM PRESS • NEW YORK-LONDON

Brief Report

Alexithymia in Holocaust Survivors with and Without PTSD

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Alexithymia was measured in non-treatment seeking, community-dwelling Holocaust survivors using the Toronto Alexithymia Scale—Twenty Item Version (TAS-20). Scores of survivors with (n = 30) and without (n = 26) posttraumatic stress disorder (PTSD) were compared, and associations among alexithymia, severity of trauma, and severity of PTSD symptoms were determined. Survivors with PTSD had significantly higher scores on the TAS-20 compared to survivors without PTSD. TAS-20 scores were significantly associated with severity of PTSD symptoms, but not with severity of trauma. This study adds to our knowledge of the relationship between alexithymia and trauma by demonstrating that this characteristic is related to the presence of posttraumatic symptoms and not simply exposure to trauma.

KEY WORDS: alexithymia; Holocaust survivors; posttraumatic stress disorder; Toronto Alexithymia Scale; symptom severity.

The emotional responses of Holocaust survivors to the massive trauma that was sustained during World War II and its aftermath has been the subject of numerous anecdotal reports and empirical investigations. In par-

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ticular, the concept of alexithymia has been used to characterize the affective impairment in Holocaust survivors (Krystal, 1988a, b). Alexithymic individuals have difficulty identifying, experiencing, and reporting emotions (Nemiah & Sifneos, 1970). The attenuated ability to experience affect leads alexithymic trauma survivors to express their psychological problems in more concrete ways, for example, through somatization and addictions (Krystal, 1988b).

The application of the concept of alexithymia to trauma survivors has had a significant impact on the mental health field's understanding of the treatment of trauma survivors. In particular, it has helped explain the failure of traditional psychoanalytic treatments for trauma survivors (Krystal, 1988a, b). For example, because alexithymic individuals have a reduced capacity to use fantasy, they may have more difficulty producing associations and dream material in psychoanalytic work (Krystal, 1988a). Furthermore, the emotional arousal that can develop in individual therapy may be quite distressing to alexithymic patients, and may interfere with the psychotherapeutic process (Swiller, 1988). Thus, the careful characterization of alexithymia and its psychological correlates in trauma survivors may have substantial treatment implications.

Earlier studies have raised several questions regarding the association between alexithymia and trauma. Primarily, it is currently unknown whether in Holocaust survivors, alexithymia can best be understood as a response to trauma exposure (Krystal, 1988; Ruesch 1948). Alternatively, this construct may specifically be associated with posttraumatic stress disorder (PTSD). In most studies of Holocaust survivors, descriptions of alexithymia have not been made in tandem with current formulations of PTSD, partly because these observations predated the formal diagnosis of PTSD. However, as recent epidemiologic studies have emphasized that not all trauma-exposed individuals develop PTSD, it is important to distinguish between correlates of trauma exposure *per se* and correlates of the subsequent development of PTSD. Furthermore, as most initial observations of alexithymia have been made in treatment-seeking trauma survivors, who may not be representative of the larger population of trauma-exposed individuals, it is important to determine if alexithymia is widely observed in non-clinical populations of trauma-exposed individuals.

In the present study, we measured alexithymia using the Toronto Alexithymia Twenty-item scale (TAS-20) (Bagby, Parker, & Taylor, 1994a) in non-treatment seeking, community-dwelling Holocaust survivors with and without PTSD. Our aim was to determine whether alexithymia would differ in Holocaust survivors with and without PTSD. We also assessed the asso-

ciation between alexithymia and severity of trauma, and alexithymia and severity of symptoms in the combined sample.

Method

Fifty-six individuals between the ages of 52-79 ($M = 66.04$, $SD = 5.4$) years of age who were interned in Nazi concentration camps were studied. Subjects were randomly selected from a publicly available list of Holocaust survivors provided by the local Historical Society and local synagogue membership rosters, and were invited via a mailing to participate. Subjects who agreed to participate provided written informed consent, and were evaluated by either a psychologist (RY, BK, KBB) or a psychiatrist (ELG, SMS). Trauma history was assessed using the Antonovsky scale (Antonovsky, 1979), which assesses exposure to a variety of extremely stressful and traumatic events including, but not limited to, wartime experiences, other life-threatening situations, economic crises, loss of loved ones and interpersonal crises. The Antonovsky Scale has been widely used in the study of Holocaust survivors (Kahana, Harel, & Kahana, 1988). The Civilian Mississippi PTSD Scale was administered as a global index of symptom severity (Keane, Weathers, & Blake, 1990). Current and past psychiatric disorder was evaluated using the Structured Clinical Interview for the DSM-III-R (SCID) for all subjects (Spitzer, Williams, Gibbon, & First, 1990). Subjects meeting criteria for a concurrent Axis I disorder other than PTSD were excluded from this study. Presence and severity of current and past PTSD were determined using the Clinician Administered PTSD Scale (CAPS) (Blake et al., 1990). Based on the results of the diagnostic assessment, the survivor group was further subdivided into those with ($n = 30$; 9 men, 21 women) and those without ($n = 26$; 13 men, 13 women) PTSD.

Alexithymia was quantified using the most recent version of the Toronto Alexithymia Scale (TAS-20). The TAS-20 has been demonstrated to possess good convergent validity (Bagby, Taylor, & Parker, 1994b) and internal reliability (Parker, Bagby, Taylor, Endler, & Schmitz, 1993). Earlier versions of TAS have been used to study trauma survivors (Zeitlin, Lane, O'Leary, & Schrift, 1989; Zeitlin, McNally, & Cassidy, 1993).

Survivors with and without PTSD were compared on the TAS-20 item by analysis of variance (group \times gender). TAS-20 scores were also correlated with severity of trauma as assessed by the Antonovsky scale, and severity of PTSD symptoms assessed by the Mississippi PTSD Scale and

Table 1. Correlations of TAS-20 Scores with Severity of PTSD and Trauma Exposure in Holocaust Survivors

Scale	Men (<i>n</i> = 21)		Women (<i>n</i> = 34)		Total Sample (<i>N</i> = 56)	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Mississippi PTSD	.554	.009	.631	.0001	.606	.0001
CAPS Intrusive	.357	.10	.247	n.s.	.278	.04
CAPS Avoidance	.518	.01	.501	.002	.485	.0001
CAPS Hyperarousal	.301	n.s.	.509	.002	.436	.0008
Antonovsky	.05	n.s.	.184	n.s.	.143	n.s.

CAPS subscale scores. Correlational analyses were also performed for each gender separately.

Results

Two way analysis of variance revealed that survivors with PTSD had significantly higher scores ($F = 7.07$; $df = 1,52$; $p = .01$) ($M = 56.93$, $SD = 14.37$) on the TAS-20 compared to survivors without PTSD ($M = 47.15$, $SD = 12.69$). Gender and group \times gender interactions were not significant (PTSD men: $M = 58.67$, $SD = 12.04$; PTSD women $M = 56.19$, $SD = 15.48$; non-PTSD men: $M = 48.54$, $SD = 10.35$; non-PTSD women: $M = 45.77$, $SD = 14.98$). Table 1 lists the results of correlational analyses in the entire sample and for each gender separately. When the sample was considered as a whole, TAS-20 scores were significantly associated with severity of PTSD symptoms as assessed by Mississippi PTSD Scale scores and all three CAPS subscale scores. However, TAS-20 scores were not associated with severity of trauma as assessed by the Antonovsky scale score.

Discussion

The present study demonstrated that Holocaust survivors with PTSD had a significantly greater degree of alexithymia compared to survivors without PTSD. Further, a strong association between alexithymia and PTSD symptoms, particularly avoidance and hyperarousal symptoms, was observed. These findings are consistent with both the generalized numbing

and emotional arousability of alexithymic patients (Swiller, 1988). However, among this sample of non-treatment-seeking survivors, the severity of trauma was not associated with the extent of alexithymia. The results suggest, therefore, that alexithymia is not simply related to having experienced trauma, but rather to the consequences of a traumatic event for the individual.

The mean alexithymia score in the non-PTSD group was almost identical to the means for nontraumatized nonpsychiatric controls (men: $M = 47.18$, $SD = 10.56$, age range 27-80; women: $M = 46.13$, $SD = 9.75$, age range 27-72 (Taylor, 1994)), suggesting that Holocaust survivors without PTSD do not show increased alexithymia. Survivors with PTSD showed scores that were comparable to those reported in a diverse group of psychiatric outpatients (men: $M = 55.27$, $SD 12.24$) for males, age range 18-66; women: $M = 54.45$, $SD = 13.48$, age range 17-75) (Taylor, 1994). Indeed, alexithymia has been demonstrated in other clinical populations, most notably, depressed (Wise, Mann, & Hill, 1990) anxious (Hendryx, Haviland, & Shaw, 1991), eating disordered (Schmidt, Jiwany, & Treasure, 1993), psychosomatic (Krystal, Giller, & Cicchetti, 1984) and personality disordered (Bach, de Zwaan, Ackard, Nutzinger, & Mitchel, 1994) patients, in addition to those with PTSD (Krystal, Giller, & Cicchetti, 1984). Consistent with other reports, no gender differences were noted in the present study. For correlational analyses, subdividing the sample by gender reduced the n 's and, accordingly, reduced the significance of some of the associations.

The present findings are consistent with those of Hyer and colleagues who demonstrated that alexithymia was not significantly correlated with the subjective experience of combat stress in Vietnam veterans (Hyer, Woods, Summers, & Boudewyns, 1990), but do not agree with the Zeitlin, Lane, O'Leary, and Schrift (1989) report of a positive correlation between the degree of alexithymia and level of combat exposure in Vietnam veterans (Zeitlin, Lane, O'Leary, & Schrift, 1989). The present results are also not compatible with findings that rape survivors without PTSD had comparably high alexithymia to rape survivors with PTSD (Zeitlin, McNally, & Cassidy, 1993). Rather, in that study there was a higher degree of alexithymia in individuals who had been exposed to repeated traumatization, suggesting that alexithymia is an indication of severity of trauma (Zeitlin, McNally, & Cassidy, 1993). Importantly, in these latter two studies comorbidity of other psychiatric diagnoses was not examined in tandem with PTSD. Given the high prevalence of psychiatric disorders that are associated with alexithymia in trauma survivors, it may be that the alexithymia levels partially reflected the presence of other psychiatric conditions.

In the present study, a relationship between alexithymia and trauma exposure was not observed. The finding that alexithymia was related to

PTSD suggests that this characteristic may be a component of PTSD, rather than an effect of trauma. This possibility would be consistent with Krystal's suggestion that alexithymia develops as a defense against the subjective emotional response to traumatic events (Krystal 1988a, b). Alternatively, alexithymia may reflect a more generalized (i.e., secondary) adaptation to chronic psychiatric illness such as PTSD, as distinguished from being a direct or indirect consequence of the trauma that caused PTSD. Support for this idea is the widespread presence of alexithymia in chronic psychiatric populations described above, and the observation that levels of alexithymia in the present subject group with PTSD was not greater than that observed in psychiatric patients.

A third explanation for the present findings is that alexithymia in Holocaust survivors with PTSD represents a preexisting trait that facilitates the expression of PTSD in response to trauma. Indeed, such "primary" alexithymia is thought to manifest in response to early developmental failure such as breakdown of object relations (e.g., disruption in forming a successful relationship with the primary caregiver) (McDougall, 1984). It is reasonable to speculate that individuals who have an attenuated capacity for cognition, memory and judgment of emotions due to early developmental events, may be particularly unable to cope with the extraordinary problem of integrating a subsequent traumatic experience. Thus, alexithymia may be a risk factor for chronic PTSD. Future studies could clarify the relationships among alexithymia, trauma exposure and PTSD by examining alexithymia at different stages following trauma to determine whether alexithymia is correlated with other PTSD symptoms over time (i.e., whether alexithymia abates and/or intensifies in conjunction with remission or reactivation of PTSD). Assessment of alexithymia before the focal traumatic event would clarify investigation of primary alexithymia.

If alexithymia is a predisposing and enduring trait then it would be expected to persist after trauma specific symptoms have abated. As such, treatment for PTSD would not involve the more ambitious goal of treating alexithymia, although it might include the recognition that patients with alexithymia are especially vulnerable to future episodes of PTSD. On the other hand, if alexithymia is a consequence of living with chronic PTSD symptoms, a comprehensive trauma therapy should address these debilitating affective symptoms as well as more specific PTSD treatment. Finally, in future studies it will be important to compare PTSD patients with and without elevated alexithymia, as effective therapeutic strategies will likely differ depending on the affective availability of the patient.

In conclusion, this study adds to our knowledge of the relationship between alexithymia and trauma by specifically demonstrating that this characteristic is related to the presence of posttraumatic symptoms and not

simply exposure to trauma. That alexithymia is more associated with clinical symptoms of PTSD, rather than trauma is consistent with the finding that alexithymia is present in many psychiatric conditions. The present results are consistent with both the possibility that alexithymia is a preexisting characteristic, and a secondary consequence of chronic illness.

Acknowledgments

We gratefully acknowledge the for data management skills of Skye Wilson, Abbie Elkin and Elizabeth Houshmand and the valuable statistical consultation of James Schmeidler. This work was supported by NIMH-R01-49536 (RY).

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